

Title (en)

STEERING HUB SYSTEM DRIVEN BY BALL JOINT UNIVERSAL ROTARY MOTOR

Title (de)

DURCH KUGELGELENK-UNIVERSALROTATIONSMOTOR ANGETRIEBENES LENKNABENSYSTEM

Title (fr)

SYSTÈME DE MOYEU DE DIRECTION ENTRAÎNÉ PAR UN MOTEUR ROTATIF UNIVERSEL À JOINT À ROTULE

Publication

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Application

**EP 17765685 A 20170222**

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Abstract (en)

[origin: US2017040861A1] The invention provides a steering hub system driven by a ball joint universal rotary motor, including a hub body and a connection mechanism. The hub body is connected to a vehicle suspension via the connection mechanism. The hub body includes a ball joint universal rotary motor inside; the ball joint universal rotary motor includes a rotatable spherical shell-shaped rotor body having an opening, a spherical stator body disposed within the rotor body and connected to the connection mechanism, a first coil assembly and a second coil assembly both wound on the spherical stator body; when the first coil assembly is energized, the spherical shell-shaped rotor body rotates with respect to a first axis of the spherical stator body, and when the second coil assembly is energized, the spherical shell-shaped rotor body rotates with respect to a second axis of the spherical stator body, the first axis is not identical to the second axis. A sealing block is disposed at the opening of the spherical shell-shaped rotor body. The motor is a self-starting synchronous servo permanent magnet motor having wide range of stepless speed variation, self-steering power and dustproof ability, and the steering of the motor is sensitive, accurate, smooth, reliable, and convenient for operation, and the steering angle is large.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

- [A] WO 2006030532 A1 20060323 - HITACHI LTD [JP], et al
- [A] US 2014125153 A1 20140508 - HO KUOKWA [CN]
- [E] EP 3249794 A2 20171129 - HONEYWELL INT INC [US]
- [A] CN 104836408 A 20150812 - BEIJING INST MECH EQUIPMENT
- See references of WO 2017157143A1

Designated contracting state (EPC)

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